

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A method for diagnosing leukemia, pre-leukemia or aleukemic malignant blood diseases wherein stem cell growth factor (SCGF) in an in-vivo sample is quantified, wherein the method comprises:

obtaining an in-vivo patient sample from a patient suspected of having leukemia, pre-leukemia or aleukemic malignant blood disease;
contacting the patient sample with one or more anti-SCGF antibodies;
detecting and/or quantifying SCGF present in the patient sample in an immunological assay; thereby obtaining a patient sample SCGF value;
comparing the patient sample SCGF value to a SCGF cut-off value;
wherein the SCGF cut-off value is set based on one or more individuals that do not have leukemia, pre-leukemia, or aleukemic malignant blood disease; and
diagnosing leukemia, pre-leukemia or aleukemic malignant blood disease if the patient sample SCGF value is above the SCGF cut-off value.

2 - 6. (Canceled)

7. (Currently amended) The method according to claim [[6]] 1, wherein the immunological assay is a sandwich assay.

8. (Currently amended) The method according to claim 7, wherein two kinds of different anti-SCGF antibodies reacting with different epitopes of stem cell growth factor (SCGF) are used in the sandwich assay, wherein the two different anti-SCGF antibodies react with different epitopes of stem cell growth factor (SCGF).

9. (Original) The method according to claim 8, wherein the antibodies are selected from polyclonal and monoclonal antibodies.

10. (Currently amended) The method according to claim 9, wherein at least one of the antibodies is a monoclonal antibody, and wherein the at least one monoclonal antibodies are antibody is selected from ~~the group consisting of~~ a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 6-28 amino acids of SEQ. ID No. 1, a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 29-59 amino acids of SEQ. ID No. 1, and a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 60-302 amino acids of SEQ. ID No. 1, all in the ~~amino acid sequence of SEQ. ID No. 1~~.

11 - 20. (Canceled)

21. (New) The method of claim 1, wherein the SCGF cut-off value is set by obtaining one or more in-vivo normal samples from one or more individuals that do not have leukemia, pre-leukemia, or aleukemic malignant blood disease; contacting the one or more normal samples with one or more anti-SCGF antibodies; detecting and/or quantifying SCGF present in the one or more normal samples in an immunological assay; thereby obtaining one or more normal sample SCGF values; and setting the SCGF cut-off value based on the one or more normal sample SCGF values.

22. (New) The method of claim 1, wherein the in-vivo sample is selected from blood, urine, spinal fluid, and puncture fluid.

23. (New) The method claim 22, wherein the in-vivo sample is blood, and the blood is selected from whole blood, plasma, and serum.
24. (New) The method of claim 1, wherein the SCGF cut-off value is 18.2 ng/ml.
25. (New) The method of claim 1, wherein the SCGF cut-off value is 15.0 ng/ml.
26. (New) The method of claim 1, wherein the SCGF cut-off value is 13.0 ng/ml.
27. (New) The method of claim 10, wherein the at least one monoclonal antibody is a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 6-28 of SEQ. ID No. 1, wherein the monoclonal antibody is KM2142 produced by hybridoma FERM BP-7922.
28. (New) The method of claim 10, wherein the at least one monoclonal antibody is a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 29-59 of SEQ. ID No. 1, wherein the monoclonal antibody is KM2804 produced by hybridoma FERM BP-7923.
29. (New) The method of claim 10, wherein the at least one monoclonal antibody is a monoclonal antibody recognizing the region shown by the amino acid sequence of residues 60-302 of SEQ. ID No. 1, wherein the monoclonal antibody is KM2945 produced by hybridoma FERM BP-7924.
30. (New) The method of claim 1, wherein the patient is suspected of having leukemia.
31. (New) The method of claim 30, wherein the leukemia is acute lymphocytic leukemia (ALL).
32. (New) The method of claim 30, wherein the leukemia is acute myeloid leukemia (AML).
33. (New) The method of claim 30, wherein the leukemia is chronic myeloid leukemia (CML).

34. (New) The method of claim 1, wherein the patient is suspected of having pre-leukemia.
35. (New) The method of claim 34, wherein the pre-leukemia is myelodysplastic syndrome (MDS).
36. (New) The method of claim 1, wherein the patient is suspected of having an aleukemic malignant blood disease.
37. (New) The method of claim 36, wherein the aleukemic malignant blood disease is lymphoma.
38. (New) The method of claim 37, wherein the lymphoma is Hodgkin's lymphoma.
39. (New) The method of claim 37, wherein the lymphoma is non-Hodgkin's lymphoma (NHL).
40. (New) The method of claim 36, wherein the aleukemic malignant blood disease is myeloma.
41. (New) The method of claim 40, wherein the myeloma is multiple myeloma (MM).